

October 9, 1956

Dear Joe:

Have you had a chance to give any thought to my proposal for the examination of DAP-analogues? Bernie Davis has done some more work with the DAP-less mutant (and I have too) and it is working out rather cleanly. When deprived of DAP in a growth medium, the mutant lyses. This lysis can be inhibited either by sucrose (10%) or by deprivation of other growth factors, so there is a good basic analogy with penicillin.

The compound itself is not commercially available, but it is accumulated rather heavily by other lysine-dependent organisms, as Davis has shown. It should not be an insuperable synthetic problem, on paper. But the main point is whether analogues can be made which will compete with DAP incorporation in organisms that normally synthesize it; at least the sulfonic analogues should be tried, or perhaps some amino-substituted forms.

I realize this is a little out of the line of your current operations, but it does look to me like a good bet for a rational chemotherapeutic. I haven't discussed this with anyone else yet; if Bristol isn't going to be interested, I ought to try to provoke someone else with it & will therefore wait to hear from you.

Yours sincerely,

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